programming said display controller system to implement said display surface zoom to provide a full screen view of said portion on said at least one zoom display device;

in said display controller system, scaling said portion of said main surface of the frame buffer memory;

in said display controller system, converting said scaled portion of said main surface of the frame buffer memory into a display signal; and

outputting said display signal from said display controller system to said at least one zoom display device.

- 2. (twice amended) The method as claimed in claim 1, wherein said step of converting includes incorporating a representation of a cursor in said display signal, said cursor having a position defined by a cursor position memory used for said main surface of the frame buffer memory.
- 5. (twice amended) The method as claimed in claim 1, wherein said user input further includes a cursor control device input used to control a cursor, and said portion is caused to be dragged or moved over said main surface of the frame buffer memory by movement of said cursor.
- 6. (amended) The method as claimed in claim 1, wherein said scaling comprises using a drawing engine of said display controller system to scale said portion into a buffer.
- 7. (amended) The method as claimed in claim 1, wherein said scaling comprises using a backend scaler of said display controller system to scale said portion.

- 8. (amended) The method as claimed in claim 7, wherein said scaling further comprises using a backend scaler of said display controller system to scale a hardware cursor associated with said portion.
- 9. (amended) The method as claimed in claim 6, wherein said scaling further comprises using a drawing engine of said display controller system to scale a hardware cursor associated with said portion into a separate hardware cursor buffer.
- 10. (amended) The method as claimed in claim 6, wherein said scaling further comprises using a drawing engine of said display controller system to scale a hardware cursor associated with said portion and overlay it onto said buffer.
- 12. (twice amended) The method as claimed in claim 1, wherein said display controller system comprises a single display output, and said user input causes a single display device to switch between displaying said portion and displaying essentially all of said main surface of the frame buffer memory, whereby said zoom is provided independently of an application program.
- 13. (twice amended) The method as claimed in claim 1, wherein said display controller system comprises at least two displays outputs, a first one of which displaying essentially all of said main surface of the frame buffer memory, and a second one of which displaying said scaled portion in a full screen view.
- 17. (twice amended) The method as claimed in claim 15, wherein said step of receiving user input further comprises:

associating said input defining said at least one said portion with one of a plurality of application programs,

wherein said step of receiving input selecting one of said at least two portions comprises determining which one of a plurality of application programs is currently

active and providing output to said main surface of the frame buffer memory in order to select from at least one of said portions of said main display surface associated with said currently active one of said plurality of said application programs.

21. (three times amended) A method of controlling a display controller system to provide a display surface zoom, said display controller system having a main surface of a frame buffer memory and output to at least one zoom display device, the method comprising the steps of:

receiving user input defining coordinates of a fractional portion of said main surface of the frame buffer memory to be scaled and displayed, said fractional portion being a non-integer fraction of said main surface of the frame buffer memory;

determining a resolution of said at least one zoom display device and adjusting an aspect ratio of said portion defined by said user input to correspond to said resolution;

programming said display controller system to implement said display surface zoom to provide full screen view of said portion on said at least one zoom display device:

scaling said portion of said main surface of the frame buffer memory;

converting said scaled portion of said main surface of the frame buffer memory into a display signal; and

outputting said display signal to said at least one zoom display device.

- 22. (twice amended) The method as claimed in claim 21, wherein said step of converting includes incorporating a representation of a cursor in said display signal, said cursor having a position defined by a cursor position memory used for said main surface of the frame buffer memory.
- 25. (twice amended) The method as claimed in claim 21, wherein said user input further includes a pointing device output used to control a cursor, and said portion is